



## Contents of *Animal Feed Science and Technology*, Volume 92

VOL. 92 NOS. 1–2

16 JULY 2001

Comparison of raw and roasted narbon beans ( <i>Vicia narbonensis</i> ) on performance and meat sensory attributes of lambs fed a roughage-based diet P. Yu, M. Sprague, A.R. Egan (Melbourne, Australia), G.H. Castleman (Walpeup, Australia) and B.J. Leurya (Melbourne, Australia) . . . . .	1
Nutritional evaluation of leaves from some major fodder trees cultivated in the hills of Nepal R.C. Khanal and D.B. Subba (Kathmandu, Nepal) . . . . .	17
Effects of feeding ensiled spearmint ( <i>Mentha spicata</i> ) byproduct on nutrient utilization and ruminal fermentation of steers A.F. Mustafa (Ste-Anne de Bellevue, Canada), J.J. McKinnon and D.A. Christensen (Saskatchewan, Canada) . . . . .	33
Research note: a consistent low starch digestibility observed in pelleted broiler chicken diets containing high levels of different wheat varieties B. Svhuis (Ås, Norway) . . . . .	45
Method of polyethylene glycol application to tannin-containing browse to improve microbial fermentation and efficiency of microbial protein synthesis from tannin-containing browse G. Getachew, H.P.S. Makkar and K. Becker (Stuttgart, Germany) . . . . .	51
Post-ruminal protein supply and N retention of weaner sheep fed on a basal diet of lucerne hay ( <i>Medicago sativa</i> ) with increasing levels of quebracho tannins M.K. Komolong, D.G. Barber and D.M. McNeill (St. Lucia, Australia) . . . . .	59
Effect of untreated, HCl treated or copper and iodine supplemented high glucosinolate mustard ( <i>Brassica juncea</i> ) meal on nutrient utilization, liver enzymes, thyroid hormones and growth of calves M.K. Tripathi (Avikanagar, India), I.S. Agrawal, S.D. Sharma and D.P. Mishra (Panjab, India) . . . . .	73
Residual metabolizable feed consumption as a method of comparing feed efficiency in steers fed silage and silage-grain diets E.K. Okine, Z. Wang, L.A. Goonewardene, Z. Mir and M.F. Liu (Alberta, Canada) . . . . .	87
Effect of variety, soil type and fertiliser on the establishment, growth, forage yield, quality and voluntary intake by cattle of oats and vetches cultivated in pure stands and mixtures G. Assefa (Addis Ababa, Ethiopia) and I. Ledin (Uppsala, Sweden) . . . . .	95
Effect of supplementing napier grass ( <i>Pennisetum purpureum</i> ) with poultry litter and sunflower meal based concentrates on feed intake and rumen fermentation in Friesian steers J.M.K. Muia (Naivasha, Kenya), S. Tamminga (Wageningen, The Netherlands), P.N. Mbugua (Nairobi, Kenya) and J.N. Kariuki (Naivasha, Kenya) . . . . .	113
<b>Short communication</b>	
Effects of bentonite on rumen fermentation and duodenal flow of dietary components in sheep fed palm kernel cake by-product M. Ivan, L. Neill (Lethbridge, Canada), R. Alimon and S. Jalaludin (Selangor, Malaysia) . . . . .	127
<b>Book review</b> . . . . .	
	137

VOL. 92 NOS. 3-4

15 AUGUST 2001

Effect of length of ensiling on silo degradation and digestibility of structural carbohydrates of lucerne and orchardgrass M.S. Yahaya, A. Kimura, J. Harai, H.V. Nguyen, M. Kawai, J. Takahashi and S. Matsuoka (Hokkaido, Japan) . . . . .	141
Measurements of physical strength and their relationship to the chemical composition of four species of <i>Brachiaria</i> M. Herrero (Edinburgh, UK and Nairobi, Kenya), C.B. do Valle (Campo Grande, Brazil), N.R.G. Hughes (Edinburgh, UK), V. de O. Sabaté (Campo Grande, Brazil) and N.S. Jessop (Edinburgh, UK) . . . . .	149
Contribution of storage and structural polysaccharides to the fermentation process and nutritive value of lucerne ensiled alone or mixed with cereal grains G. Jaurena (Ciudad de Buenos Aires, Argentina) and G. Picard (Chile, Argentina) . . . . .	159
Digestion by sheep of monosaccharide constituents of direct cut alfalfa silage made with SO <sub>2</sub> -treated wheat straw D. Ben-Ghedalia and J. Miron (Bet Dagan, Israel) . . . . .	175
The effect of condensed tannins in <i>Lotus corniculatus</i> upon reproductive efficiency and wool production in ewes during autumn B.R. Min (Palmerston North, New Zealand), J.M. Fernandez (Baton Rouge, LA, USA), T.N. Barry (Palmerston North, New Zealand), W.C. McNabb and P.D. Kemp (Palmerston North, New Zealand) . . . . .	185
Urinary excretion of duodenal purine derivatives in Kedah-Kelantan cattle O. Pimpa, J.B. Liang, Z.A. Jelan and N. Abdullah (Selangor, Malaysia) . . . . .	203
Degradation in the rumen of lupin ( <i>Lupinus albus</i> L.) and pea ( <i>Pisum sativum</i> L.) seed proteins. Effect of heat treatment J. Aufrère, D. Graviou (St. Genes Champanelle, France), J.P. Melcior (Nantes, France) and C. Demarquilly (St. Genes Champanelle, France) . . . . .	215
Effect of variety, stages of maturity and botanical fractions on phosphorous concentration and in situ degradability characteristics of phosphorous of whole crop rice silage M.R. Islam, T. Nishida, S. Ando, M. Ishida (Tochigi, Japan), N. Yoshida and M. Arakawa (Saitama, Japan) . . . . .	237
Protein degradability of soybean meal coated with different lipid substances and its effects on ruminal parameters when included in steer rations H.B. Manterola, D.A. Cerda and J.J. Mira (Santiago, Chile) . . . . .	249
Book reviews . . . . .	259
Contents of <i>Animal Feed Science and Technology</i> , Volume 92 . . . . .	265

